

Karavaev, M. N.  
BASIC REGULARITY OF THE YAKUTIYA LAND-  
SCAPE (Osnovnye Zakonomernosti v Raspredelenii  
Landshaftov Yakutii) tr. by Nedla Georgevitch.  
Jan 60 [13]p. 6 refs.  
Order from OTS or SLA \$1.60 62-33094

Trans. of Nauchnye Doklady Vysshai Shkoly.  
Geologogeograficheskie Nauki (USSR) 1959, no. 2,  
p. 46-53.

DESCRIPTORS: \*Geography, Forestry, Terrain,  
Climatology, Soils.

(Earth Sciences--Geography, JT, v. 9, no. 9)

62-33094

I. Karavaev, M. N.  
II. Engineer Corps,  
Washington, D. C.

Office of Technical Services

Principal Lines of Scientific Research,  
Planning and Design in the Coal Industry  
of the USSR, by A. V. Dokukin.  
RUSSIAN, per, Nauchn. Dokl. Inst. Gorn.  
Dala in Sverdlovsk, 1964.  
MLL 8313.4 1964 (5007) (On Loan)

Aug 65

286,937

TT-63-24348

- I. Volodarskii, R. F.
- II. ACIC TC-661
- III. Aeronautical Chart and Information Center, St. Louis, Mo.

Volodarskii, R. F.  
INTERPRETATION OF GRAVITY ANOMALIES OF  
THE EASTERN REGIONS OF THE RUSSIAN PLAT-  
FORM IN THE LIGHT OF CONTEMPORARY  
GEOLOGICAL AND GEOPHYSICAL DATA (Istolkovanie  
Anomalii Sil'y Tyazhesti Vostochnykh Rationov Russkoi  
Platform v Svete Sovremennykh Geologicheskikh  
i Geofizicheskikh Danykh)  
D. Shalkhvali, tr. Jul 63 [isp]  
ACIC TC-661  
Order from OTS, SLA, or ETC \$1.60 TT-63-24348

Trans. of Nauchnye Doklady Vysshel Shkoly. Geologo-  
geograficheskii Nauch [USSR] 1959, no. 2, p. 216-222.  
(Abstract available)

DESCRIPTORS: \*Gravity anomalies, \*Geophysics,  
Sedimentation, Lithosphere, Structural geology,  
Terrestrial magnetism, Maps, Analysis.  
(Earth Sciences--Geology, TT, v. 11, no. 3) (over)

Office of Technical Services

The Use of Radioactive Indicators in Studying  
of Corrosion by a Superimposed Current From the  
Outside, by A. I. Levin, V. I. Palichova.

RUSSIAN, per, Nauchnye Dok Vyshe; Khim,  
i Khim Tekh, No 1, 1958, pp 32-35.

\*JPRS for Pleating Arsenal  
R-806-N  
Dover, New Jersey

3 Jan 62

Determination of Chlorine and Bromine in Organic  
Compounds by Means of Magnesium Nitride, by A. P.  
Terent'ev, et al.

RUSSIAN, per, Nauch. Dok. Vysshykh Shkoly Khim i  
Khim. Tekh., No 1, 1958, pp 83-85.

ATS RJ-2018

Sci - Chem

Jan 60

105,679

61-20627

Sorokin, M. F. and Laguzina, A. M.  
THE INTERACTION OF CERTAIN ARYLGLYCIDIC  
ESTERS WITH ALCOHOLS OF THE ALIPHATIC  
SERIES. [1961] 7p. 3 refs.  
Order from OIS or SLA \$1.10

61-20627

I. Sorokin, M. F.  
II. Laguzina, A. M.

Trans. of Nauchnye Doklady Vysshei Shkoly. Khimiya i  
Khimicheskaya Tekhnologiya (USSR) 1958, no. 1,  
p. 110-114.

DESCRIPTORS: \*Epoxy resins, Resins, Synthesis,  
\*Resorcinol, Ethers, Phenoxy radicals, Propanes,  
Epoxides, \*Alcohols, Propanols, Alkoxy radicals,  
Chemical reactions.

(Chemistry--Organic, IT, v. 7, no. 5)

Office of Technical Services

Industrial Synthesis of Allylcarbinol and  
n-Butyl Alcohol Based on Propylene and  
Formaldehyde, by M. I. Farberov, A. M. Kirov,  
5 p.

RUSSIAN, per, Nauch Dok Vysshey Shkoly Khim  
i Khim. Tekhnol., 1958, No 1, pp 148-252.

AMS-55L32R

Sci  
Feb 80  
Vol 2, No 12

107963

The Nature of Detonation of Certain Explosives  
and the Effect of Pressure on it, by K. K. Andreyev,  
B. S. Samsonov, 6 pp.  
RUSSIAN, per, Nauchnyye Doklady Vysshey Shkoly.  
Khimiya i Khimicheskaya Tekhnologiya, No 2, 1958,  
pp 229-232.  
ARM/FSIC/HT-23-1072-68

ATS-65L 32R

TIL-T-5172

Sci/Chem  
Sept 69

389,924



The Synthesis of Mono-Alkyl-Cyclohexanes of  
C15-C18 Composition with an Increased Density,  
by Ye. B. Sokolova, G. V. Krasnova.

RUSSIAN, per, ~~Khimiya~~ Dokl. Vyshey Khim  
i Khim Tekh, No 2, 1958, pp 330-334. 9662622

ATIC MEL-347/1

Sci - Chem

Jul 61

159,279

61-23655

Drozdov, N. S. and Grushetskaya, L. A.  
PREPARATION OF 12-HYDROXY-9, 10-EPOXYSTEARIC ACID. [1961] Sp. 4 refs.  
Order from OTS or SLA \$1.10 61-23655

I. Drozdov, N. S.  
II. Grushetskaya, L. A.  
III. Translations, New York

Trans. of Nauchnye Doklady Vysshei Shkoly. Khimiya  
(Khimicheskaya Tekhnologiya (USSR) 1958, no. 2,  
p. 339-341.

DESCRIPTORS: \*Stearic acids, Epoxides, Synthesis,  
Organic acids.

The synthesis of 12-hydroxy-9, 10-epoxystearic acid,  
m.p. 31-32° and  $n_D^{20} = 1.4578$  from the methyl ester  
of ricinoleic acid via the methyl ester of 12-acetoxy-  
oleic and 12-acetoxy-9, 10-epoxystearic acids is  
described. (Author)

176655

Office of Technical Services

(Chemistry--Organic, TT, v. 6, no. 6)

S-93/60

(NY-3560).

The Calculation of Cascades Used in Separating  
Stable Isotopes, by V. E. Turkin, 5 pp.

RUSSIAN, par, Nauch Dok Vysshay Shkoly, Khim  
i Khim Tekh, No 2, 1958, pp 385-397.

JPRS 2459

Sci - Chem  
Apr 60

112,623

S-95/60

(NY-9580).

Separation of Isotopes by Rectification.  
Rectification of Methanol, by Ya. D. Zel'venskiy,  
V. Ya. Sokolov, V. A. Shalygin, 8 pp.

RUSSIAN, GER, Nauch. dok. Vyssh. Shkoly, Khim. i  
Khim. Tekh., No 2, 1958, pp 388-391.

JPRS 2460

Sci - Chem  
May 60

116,690

Bol'shakov, K. A., Fedorov, P. I., and  
Shakhova, M. N.  
THE SATURATION VAPOR PRESSURE OF THALLOUS  
CHLORIDE. [1961] 6p. 6 refs.  
Order from OTS or SLA \$1.10

61-19131

Trans. from [Nauchnyye Doklady Vysshey Shkoly  
Khimiya i Khimicheskaya Tekhnologiya] (USSR) 1958,  
no. 3 [p. 408-412].

DESCRIPTORS: \*Thallium compounds, \*Chlorides,  
\*Vapor pressure.

The saturation vapor pressure of chemically pure  
thallous chloride was determined by the boiling point  
and the saturation methods. The values obtained with  
both methods were in good agreement above about  
620°C, indicating that thallous chloride in the vapor  
phase consists of monomeric molecules. Below about  
600°C, the points obtained by the saturation method are  
(Chemistry--Physical, TT, v. 6, no. 8) (over)

61-19131

- I. Bol'shakov, K. A.
- II. Fedorov, P. I.
- III. Shakhova, M. N.
- IV. Translations, New York

135161

Office of Technical Services

Calorimetric Method for Determining the Presence of  
Ion Association in Solutions of Electrolytes, by  
E. V. Kiseleva.

RUSSIAN, per, Nauch Dok Vysshe<sup>2</sup> Shkoly<sup>2</sup> Khim i  
Khim Tekh, Vol. IV, 1958, pp 621-623.

\*AEC

Sci - Chem

Nov 59

Theoretical Bases of Methods of Determining the  
Chemical Stability of Explosives, by K. K.  
Andreyev. UNCL

RUSSIAN, per, Nauch. Dok. Vyssh. Shkoly, Khim i  
Khim, Tekh, No 4, 1958, pp 635-639.

DBIR LNU M.1293

(loan)

Sci - Chem  
May 60

116,509

Thermal Decomposition Mechanism of Calcium,  
Strontium, and Barium Sulfites, by A. N. Ketov, V. V.  
Pechkovskiy, 6 pp.  
RUSSIAN, per, Nauch Dok Vyssh Shkoly, Khim i Khim  
Tekh, No 4, 1958, pp 667-671. 9220543  
AEC-Tr-6259

Sci-Mat & Met  
Mar 64

252,224



Electron Diffraction Study of the Molecular  
Structure of Ia-Halides, by P. A. Akiakin,

V. A. Samoylov, 6 pp.

RUSSIAN, par. Nauchnye i Tekhnicheskiye Sborniki,  
Khimiya i Khimicheskaya Tekhnologiya, 1959,

pp 5-7.

ASC AML Tr-349

327,974

Sci - Chemistry  
Jul 67

Golodova, L. S. and Sokol'skiy, D. V.

A POTENTIOMETRIC METHOD OF STUDYING SELECTIVITY DURING HYDROGENATION OF FATS IN SOLVENTS (Potentsiometricheskii Metod Issledovaniya Selektivnosti pri Gidirovani Zhirov v Rastvoritelyakh). Feb 61 (6)p. 2 refs. RTS 1744.  
Order from LC as SLA m\$1.80, ph\$1.80 61-19103

Trans. of Nauchnye Doklady Vysshey Shkoly. Khimiya i Khimicheskaya Tekhnologiya (USSR) 1959, no. 1, p. 28-31.

Potentiometric measurements during hydrogenation of fats and of their simplest analogues, unsaturated acid esters, give a correct indication of the change in fatty acid composition and of the sequence in the saturation of acids of different degrees of unsaturation. With hydrogenation of fats in solvents, the process is sufficiently selective. The potentiometric method is very suitable for a study of the reaction selectivity during hydrogenation of both natural fats and oils and their synthetic analogues. (Author)

61-19103

1. Fats--Hydrogenation
2. Catalysts--Effectiveness
3. Potentiometers--Applications
- I. Golodova, L. S.
- II. Sokol'skiy, D. V.
- III. RTS-1744
- IV. Department of Scientific and Industrial Research (Gr. Brit.)

100100

Office of Technical Services

(Chemistry--Physical, TT, v. 5, no. 12)

Investigation of the Vanadium Tellurium System,  
by Yu. M. Ukrainsky, A. V. Novoselova, Yu. P.  
Simanov, 7 pp. 1

RUSSIAN, per, Nauch Dok Vysshey Shkoly, Khim i  
Khim Tekh, No 1, 1959, pp 62-66.

MDF U-103

9093191

157065

Sci  
Nov 61

Compounds of Sn(III) With NaF III, by A. M.  
Kruglov, V. P. Koshargan.

RUSSIAN, per, Kazakh Dok. Vysshel. Shkol. 1959  
I Khimich. Tekh., Vol. III, No. 1, 1959, pp 70-73.

MIL. INT. 2077

Sel. - Chem

Aug 62

207.197

9, 30  
The Extraction of Salicylates of Scandium, Yttrium,  
Cerium, Lanthanum, Uranium and Thorium, by B. M.  
Sudarikov, V. A. Zaytsev, U. G. Puchkov, 9 pp. UNKL

RUSSIAN, per, Nauchnyye Dok Vysshey Shkoly, Khim  
i Khim Tekh, No 1, 1959, pp 80-83. 9660769

ATTC MCL-249/III

Sci - Chem

Apr 61

Telegram TC 43547

149,695

20,  
The Formation of Complex Compound of Neodim and  
Ytterbium with Ethylenediaminetetraacetic Acid  
with Cation-Exchanging Chromatography, by L. I.  
Murtynenko, 10 pp. UNCL

RUSSIAN, per, Nauchnyye Doka Vysshey Shkoly, Khim i  
Khim Tekh, No 1, 1959, pp 84-87. 9660769

ATTC MCL-249/III

Sci - Chem

Apr 61  
Telecom ZC 41547

149,697

Bashkirov, A. N., Kamzolkina, Ye. V., and  
Kagan, Yu. B.  
CATALYSTS IN THE DECOMPOSITION OF CARBON  
MONOXIDE. [1961] 4p. 1 ref. DSIR Trans. NT771;  
M. 2388.  
Order from OTS or SLA \$1.10

61-15501

Trans. of Nauchnye Doklady Vysshey Shkoly. Khimiya  
Khimicheskaya Tekhnologiya (USSR) 1959, no. 1,  
p. 162-165.

DESCRIPTORS: \*Carbon compounds, \*Monoxides,  
Decomposition, \*Catalysts.

(Chemistry--Physical, TT. v. 6, no. 2)

61-15501

I. Bashkirov, A. N.  
II. Kamzolkina, Ye. V.  
III. Kagan, Yu. B.  
IV. DSIR NT-771  
V. DSIR L.I.U. M. 2388  
VI. Department of Scientific  
and Industrial Research  
(Gr. Brit.)

104557

Office of Technical Services

Features of the Structure and Properties of Foam  
Ceramics Made From the Pure Oxides of  $Al_2O_3$  and  
 $ZnO$ , by I. Ya. Guman. USCL

RUSSIAN, per, Nauch Dok Vysshay Shkoly: Khim i  
Mhin Tekh, No 1, 1959, pp 181-185.

DSIR LIA ITS 1459

(12s. 60.)

113,014

Sci - Chem  
Apr 60



Electron Diffraction Study of the Structure of  
Neodymium Halide Molecules, by P.A. Akishin,  
V. A. Naumov, et al.

RUSSIAN, per, Nauchnye Doklady Vysshii Shkoly.  
Khimiya i Khimicheskaya Tekhnologiya, 1969.

pp 229-232. 9233461

AEC ANL-tr-310

Sci/Chemistry  
Aug 66

306,358

Mechanical Thermal Stability of Crystals of Some  
Explosives, by K. K. Andreev,

RUSSIAN, <sup>pt 5</sup> Fauch. Dok Vysshykh Shkoly, Khim i Khim  
Tekh, No 2, 1959, pp 244-246.

ANEC Tr-3960

Sci - Chem

Apr 60

115,072

Redox Potential of Xanthates, by  
B. A. Stepanov.  
RUSSIAN, per, Nauchnye Doklady Vseshei  
Shkoly. Khimiya i Khimicheskaya  
Tekhnologiya, No 2, 1959, pp 277-279.  
NTC 72-11232-07D

May 72

Shchegolevskaya, N. A. and Sokolov, S. I.  
 CERTAIN CHARACTERISTICS OF THE KINETICS  
 OF THE PROCESS OF COPOLYMERISATION OF UN-  
 SATURATED POLYESTERS AND VINYL MONOMERS  
 WITH THE FORMATION OF A 3-DIMENSIONAL  
 NET WORK (Nekotoryye Osobennosti Kinetiki  
 Protsessa Sopolimerezatsii Nepredel'nykh Polyeftirov i  
 Vinil'nykh Monomeroov s Obrazovaniyem Prostranstven-  
 noy Struktury). June 60 [5p. 6 refs. TIL/T-5121:  
 [DSIR LLU] M2269.  
 Order from LC or SLA ml\$1.80, ph\$1.80 61-13751

Trans. of Nauchnyy Doklady Vyssh[ey] Shkoly.  
 Khimicheskaya Tekhnologiya (USSR)  
 1959, no. 2, p. 350-353.

There were examined the conditions of development of  
 simultaneous polymerisation of unsaturated polyesters  
 based on sebacic and maleic acids and dimethylene-  
 glycol and a mixture of vinyl monomers - styrene and  
 methyl methacrylate with the formation of monolithic  
 (Chemistry--Organic, TT, v. 5, no. 12) (over)

61-13751

1. Copolymerization
2. Esters--Polymerization
3. Vinyl compounds--  
Polymerization
4. Polymers--Molecular  
structure
- I. Shchegolevskaya, N. A.
- II. Sokolov, S. I.
- III. TIL/T-5121
- IV. DSIR LLU M. 2269
- V. Ministry of Aviation  
(Gt. Brit.)

100614  
 Office of Technical Services

On the Technology of the Manufacture of Zirconia  
Products by Centrifug From Aqueous Suspensions,  
by G. P. Kalitga, V. A. Kolbasova.

RUSSIAN, per, Nauch. Dok. Vseshey Shkoly, Khim i  
Khim Tekh, No 2, 1959, pp 386-389.

DSIR LAM RRS 1455

Sci - Chem

Aug 60

122,533

Nickel-Zinc Batteries, by V. M. Plerov.

RUSSIAN, part, Nauch Dok Vysshei Shkoly. Khim 1  
Khimich Tekhn, No 2, 1959, pp 402-405.

OTB 61-27509

189,535

Sci  
Mar 62

Vol VII, No 2

Approximate Aerodynamic X Calculations for  
a Two-Phase Gas Solid Particle System,  
by A. V. Chechetkin, 6 pp.

RUSSIAN, per, Nauch Doklady Vyshey  
Shkoly Khim i Khim Tekh.  
No 2, 1959, pp 406-410.

ATS-50143R

ATC/RJ-2747

197,925

Sci  
Vol IV, No 11  
May 62

Mechanical Technology of Wood. Theoretical  
Analysis of Conditions Governing Separation of  
Wood by a Cutting Blade, by S. Voskresenskiy.

RUSSIAN, per, Nauchnye Doklady Vysshei Shkoly.  
Lesoinzhenernoe Delo, No 1, 1959, pp 217-222,

CSIRO/No ~~5724~~ 5767

Sci  
Dec 62

WALL, R. A. 1962. THE MECHANICAL  
TECHNOLOGY OF WOOD. THEORETICAL  
ANALYSIS OF CONDITIONS GOVERNING  
SEPARATION OF WOOD BY A CUTTING  
BLADE. CSIRO, MELBOURNE.



Synthesis of Automatic Control Systems With a  
Sign-Changing Input for the Integrating Corrective  
Element, by E. K. Shigin, 4 pp.

RUSSIAN, per, Nauchnye Doklady Vys. Shkoly,  
Mashinostroyeniye i Elektromekhanika, No 1,  
Jan-March 1958, pp 193-199.

Automation Express  
Vol 1, No 8  
Internat'l. Physical Index

Sci

Jun 59

available 12-5-74  
90, 424

SMALL & SCALE EJECTOR MODELS, BY B. S.  
STEPHANOVSKIY, 22 PP.

RUSSIAN, PER, NAUCH DOK VYSSHEY SHKOLY,  
MASHK 1 PRIBOROSTOY, NO 1, 1958, PP 75-86.  
9665938

FTD-TT-62-448

SCI - AERO  
AUG 62

207,972

Questions on Scientific Problems in the Progress  
of Foundry Production, by D. P. Ivanov, 19 pp. UNCL

RUSSIAN, per, Nauch Dok Vysshey Shkoly, Mashin i  
Pril, No 2, 1958, pp 7-14. 9560815

ATTIC MCL-142/III

USNR - Econ

Sci .. *E*  
*Page*

Apr 61

Telegram 4:175

149,702

The Fundamental Theoretical Problems in the  
Development of the Technology of Casting Pro-  
duction, by H. H. Rubtsov, 10 pp. URKL

RUSSIAN, Ter, Nauch Dok Vyshey Shkoly, Mash i  
Prib, No 2, 1958, pp 15-18. 9660815

ATTC MEL-142/III

USSR - Econ

Sci - Engr

Apr 61

Telcom 11175

149, 704

DeLacosa 11117

About the Entry of Gas Into a Variable  
Volume Cylinder, by D. V. Goryunov,  
3 pp.

RUSSIAN, part, Nauchnyye Dokl. Vsesoyuzn.  
Akad. Nauk SSSR, Ser. Fiz.-Mat. Nauki, No. 12,  
1958, pp. 68-71. 9672817

FID-TE-68-55

Sci. Rep.

31 Jun 62

New Types of Castings and Problems <sup>2</sup> in Raising  
the Precision in Casting, by N. N. Rubtsov, 18 pp.  
ENI URCH.

RUSSIAN, per, Nauch. Dok. Vyshey Shkoly, Mash i Prib,  
No 2, 1958, pp 1 0-107. 9660815

ATTC MIL-142/III

Sci - Eng

149,703

Apr 61

Telecom 41175

Speeding Up the Production Rate on New Machines,  
by V. L. Butusov. 2 pp

RUSSIAN, per, Nauch Dok Vysshey Shkoly Mash i  
Prikladnoy, No 3, 1958, pp 15-24. 967/156

~~SECRET~~ \*ATIC MCL-1269/1

USSR  
Econ  
Sci - Eng  
10 Jul 61

Wire 6-7-73.

Contribution to the Theory of Packing Foundry  
Molds, by G. F. Balandin, 14 pp.

RUSSIAN, per, Nauchnyye Dok Vyshey Shkoly,  
Mashinostroy i Priborostroy, No 3, 1958,  
pp 122-131. *CIA 7651836*

ATIC EX-124

Sci

Apr 61

*147,505*



Instantaneous Temperatures on Contact Surfaces  
Due to Friction, by B. P. Stoyul'kin, 16 pp.  
RUSSIAN, per, Nauchn Dok Vyshey Shkoly, Mash i  
Prib, No 4, 1958, pp 73-81. 9652278  
DDC RSICK-142

Sci - Engr  
Apr 64

255,166

Evaluating the Precision of Castings, by Yu.A. Vorobyev.

RUSSIAN, per, March Det Vys Shkoly, Mash 1 Prib,  
No 3, 1958, pp 141-148. 9661836.

AMTC MCL 124/1

Sci - Min/Met  
Jun 61

155,515

61-13761

Paley, M. M.  
STANDARDISATION OF THE WAVINESS OF SUR-  
FACE OF MACHINE COMPONENTS. [1961] [8]p.

[DSIR LLU] M 2279

Order from OTS or SLA \$1.10

61-13761

Trans. of Nauchnyye Doklady Vyshey Shkoly. Mashino-  
stroeniye ~~Tr. Nauchno-issledovatel'skogo tsentra~~ (USSR) 1958, no. 4,  
p. 152-159.

DESCRIPTORS: \*Diesel engines, Pistons, Rods, Vibra-  
tion, Tests.

The waviness of surface on components operating under  
condition of dry, semi-liquid and liquid friction brings  
about a great wearing of the pairs. The supporting  
power of a cylindrical bearing is diminished in the  
presence of a wavy surface. The supporting power  
(load-carrying capacity) of a plane-parallel step bearing  
is increased in the presence of waviness. There is an  
optimal ratio of spacing to the height of undulation  
(Machinery--Engines, TT, v. 6, no. 3) (over)

L. Paley, M. M.  
IL DSIR LLU M. 2279

175203

Office of Technical Services

61-13762

Dunin-Barkovsky, I. V. and Kartasheva, I. N.  
RELIABILITY OF MEASUREMENTS OF SURFACE  
TEXTURE. [1961] [9] p. 5 refs. [DSIR LLU] M 2280.  
Order from OTS or SLA \$1.10 61-13762

Trans. of Nauchnyy Doklady Vysshey Shkoly.  
Mashinostroyeniye i Priborostroyeniye (USSR) 1958,  
no. 4, p. 160-169.

DESCRIPTORS: \*Metals, Surface properties, Meas-  
urement, Reliability.

Ways are found for determining the reliable measure-  
ments of the surface roughness and the number of  
measurements required under different conditions.  
The adequacy of the recommendations have been con-  
firmed by experimental investigation. (Author)

(Metallurgy, IT, v. 6, no. 3)

I. Dunin-Barkovsky, I. V.  
II. Kartasheva, I. N.  
III. DSIR LLU M. 2280

175200

Off. Technical Services

61-13764

Rubinshteyn, S. A.  
STRESSES AND FORCES IN THE CUTTING OF  
METALS. [1961] [11] p. 11 refs. [DSIR LLU] M 2282.  
Order from OTS or SLA \$1.60 61-13764

Trans. of ~~Mashinostroyeniye~~ ~~Doklady Vsesoyuznogo Nauchno-Issledovatskogo Instituta Mashinostroyeniya~~ (USSR) 1958, no. 4,  
p. 170-180.

DESCRIPTORS: Stresses, Plasticity, Theory, \*Metals,  
Deformation, \*Cutting tools, Machining.

The method of determining the stresses, based on the theory of plasticity is reviewed under the following topic headings: (1) contact stresses and forces on the front surface; (2) constancy of volume condition during the formation of the chip element; (3) condition of equilibrium of the chip elements; (4) determining the forces and stresses of cutting; (5) method of calculating forces and stresses; and (6) examples of calculation.

(Machinery--Manufacturing, TT, v. 6, no. 4)

I. Rubinshteyn, S. A.  
II. DSIR LLU M. 2282

Office of Technical Services

(BY-3905/1)

Improvement of the IAB-451 Instrument, by L. A.  
Vasil'yev, 11 pp.

RUSSIAN, per, Nauchnyye Doklady Akad. Nauk SSSR,  
Mash. i Prikl. Mekh., No 11, Oct/Dec 1958, pp 230-237.

JPRS-L-1117-N

Sol. - Eng.  
Dec 59

103,481

# 14

(NY 4253)

High-Power High-Frequency Test Stand VIO-1 MAI-VIAI  
(Vibration Test Stand No 1 of the Moscow Aviation  
Institute and the All-Union Institute of Aviation  
Materials) for Testing the Endurance and Vibration  
Strength of Parts and Units of Jet Engines and  
Aviation Materials, b/ A. M. Sulima, M. I.  
Yevstigneyev, V. M. Zrakov, 19 pp.

RUSSIA: per, Nauch. Dok. Vyssh. Shkoly, Mash i Priob,  
No 2, 1959, pp 110-119.

JPRS 5160

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Sci - Engr

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